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AIR FORCE MATERIEL COMMAND**

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Logistics Staff

**REPAIR PARTS KITS USERS MANUAL
(CORRECTED COPY)**

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This manual provides policy and procedures for the logistics management of repair parts kits. AFMCM 171-233 and Technical Order (TO) 00-25-200 are related publications. This manual applies to all air logistics centers (ALC) Directorates of Financial Management (FM), and Product Directorates.

SUMMARY OF REVISIONS

This revision incorporates the requirements and procedures formerly in AFMCM 65-42 and reorganizes text. It establishes additional procedures for building and documenting kits. It also removes the section previously devoted to D031 mechanized repair parts kits processing.

Chapter 1

INTRODUCTION

Section 1A—Definitions, References, Abbreviations, Acronyms and Terms

1.1. Definitions. A repair parts kit is a group of parts or materials, identified as one line item, used to restore an assembly or subassembly to a serviceable condition. Time Compliance Technical Order (TCTO) kits and crash battle kits are not repair parts kits and are not affected by this manual. Parts and materials selected for inclusion within repair parts kits are procured, stocked, requisitioned, and used as one line item. Attachment 1 provides a glossary of abbreviations used throughout this manual.

1.2. Abbreviations and Acronyms. See attachment 1.

Section 1B—Responsibilities for Kits Management

1.3. Responsibility of AFMC, ALCs, and Contractors. HQ AFMC/LG will be responsible for the interpretations of this Manual and for the overall policy associated herein. ALCs are expected to manage, review and utilize kits in the most practical and “Smart Business” approach. Each ALC should issue supplemental instructions to those contained herein (with HQ AFMC concurrence), which reflects the difference in materials managed by them.

1.3.1. ALC/FM will be responsible for overall center policy, and will assign a repair parts kit monitor who will be responsible for the serving as the focal point for all aspects of repair kit management. This person/persons will ensure compliance with this manual. They will periodically review the repair parts kit program and recommend improvements. Be responsible for coordination of inter-directorate activity on repair parts kits. Responsible for the chairing of a panel, of the various activities outlined within this manual/deemed necessary. When and where appropriate other services managers, and contractor representative are to be included to conduct kit reviews.

1.3.1.1. The ALC/FM policy OPR will be responsible for providing sufficient information to the SPM or appropriate Technical Activity so that they may:

1.3.1.2. Ensure all participatory engineers/equipment specialists (ES) engaged in any aspect of repair parts kit development, are well versed in the purpose, development, use and refinement of repair parts kits. Review each technical order compliance/engineering change proposal (TOC/ECP) issued on prime equipment to determine impact on kit contents and take necessary action. Initiate request through the Production Management Activity for sampling of parts kits component usage by technology repair center (TRC) when required to evaluate kit contents. Notify kit users at using command Air Force bases of revisions to kit components through the technical order system, illustrated parts breakdown (IPB), technical manuals, and appropriate stock list change actions. Notify appropriate Maintenance Activity personnel of pending buy decisions upon receipt of information from the inventory management specialist (IMS), that requires validation of replacement factors, etc.

1.3.2. The ALC Production Management Activity: will request and receive parts kit usage data from the TRC when requested by the Equipment Specialist. Add a line item to a pending repair contract or modifies an existing repair contract if component usage data are required for kits used by repair contractors.

1.3.3. The ALC Item Management Activity: will notify the appropriate Equipment Specialist of pending buy upon receipt of data level or buy notices. Advise the gaining IMS inventory control point (ICP) of items removed from kits and provide annual requirements.

1.3.4. The ALC Maintenance Activity: will notify the managing Equipment Specialist when new repair parts kit development or revision of an existing kit is needed to correct uneconomical use of repair parts kits. Ensure shop personnel are oriented in the use of both line items and repair parts kits. Initiate sampling of repair parts kits usage upon request of the responsible Production Management Specialist. Notify depot supply by memorandum, of line item support requirements when normal material standard refinement, and workload projection processing will not give timely support for any line items removed from repair parts kits.

1.3.5. The ALC Financial Management Cost Analysis Activity/other areas as needed: will provide appropriate representation during kit review to ensure kiting decisions are based on cost justification and customer support.

1.3.6. Contractor or other services kit providers will take necessary action to provide line item support upon appropriate notification by establishing AFMC Retail Stock Control and Distribution special levels. Notifies the Maintenance Activity when unable to provide line item support by date of initial use. Provide appropriate representation during kit review.

Chapter 2

KIT CONTENTS

Section 2A—Criteria and Component Parts

2.1. Criteria for Selection of Kit Contents. The selection of parts or material to be included in repair parts kits must be based on specific, cost-effective benefits in the area of supply support, inventory management, cost to maintenance, customer support, or improved overhaul and repair.

2.2. Components of Repair Parts Kits. Kit components include expense items and materials only. These components will be stocklisted items subject to the limitations outlined in 2.2.1-2.2.7.

2.2.1. Kits containing shelf life controlled components, as identified in AFM 67-1, volume 1, part one chapter 10, sect Q, or TO 00-20K-1, will be assigned the expiration date of the shortest shelf life component contained in the kit. Items which have short shelf life should be reviewed for the initiation of a supplemental kit following the same procedures as outlined herein.

2.2.2. A range of oversized or dimensional parts may be included in kits, provided the cost/need is clearly justified and fully coordinated by the Equipment Specialist. The economic justification must be retained as a permanent record in the kit file.

2.2.3. Parts in excess of 100 percent replacement should be considered for placement in supplemental kits identified to the end item/assembly. Kits which are not 100 percent usage and are not practical for supplemental kits will have remaining unopened parts packages returned to the SOS for refilling of the kit. If cost analysis and estimates of the item not required to accomplish repair is justified, this justification must be retained in the kit file record. The same cost saving analysis is to be applied to supplemental kits as regular repair kits. The percentage of each kit components will not require the degree of disassembly of the end item to exceed that specified by applicable technical order.

2.2.4. Bulk issue material such as paint, oil, adhesives, solvents, wire, cable, or solder may be included in kits only if the residue after repair is insignificant and the item should not be normally be available in bench stocks at the repair activity.

2.2.5. Potentially hazardous material, as identified in AFR 71-4 or the Code of Federal Regulations (CFR) title 49, parts 100-189, will only be used in kits with approval of Packaging and Transportation Activity. The Item Management Team (IMS/ES/Engineer) will provide any relevant information concerning the contents, storage, shipment, and use of any kit containing potentially hazardous material.

2.2.6. Stocklisted components of repair parts kits will be screened against the D043 Master Item Identification Control Systems by Equipment Specialist. If an item is recorded in an Interchangeability and substitutability (I&S) relationship, the I&S master item should be utilized in the kit. However, with ALC Item Management Team approval/concurrence substitute items may be utilized where needed.

2.2.7. The use of kit components will not require the degree of disassembly of the end item to exceed that specified by applicable technical order.

2.3. Government-Furnished Material (GFM). GFM Components of repair parts kits are screened to ensure use of available assets according to AFM 67-1, Vol III, Part One Chapter 9. Age Controlled items will not be furnished as GFM.

2.4. Special Considerations. Consideration should be given to those items proposed for inclusion in kits, which are restricted in nature (sole source control), for acquisition purposes. The alternatives to inclusion of these items in kits are: individual line item support, or the establishment of a separate supplemental kit. Before considering the alternatives, each item in the kit should be assigned an appropriate acquisition method code/acquisition method suffix code (AMC/AMSC). Upon completion of the assignment of the codes, consideration of the factors as outlined in paragraph 2.4.1-2.4.4 should be made prior to establishment of the kit.

2.4.1. What percentage of the total items in the kit is subject to restricted acquisitions?

2.4.2. Are the restricted items identified to more than one manufacturer?

2.4.3. Have previous difficulties been encountered in procuring, as a single line item/kits, any of the restricted items contained in the kit or the kit itself as a result of these difficulties?

2.4.4. Has consideration been given to the AMC/AMSC assigned to the components when assigning an AMC/AMSC to the complete kit?

2.5. Return of Unused Kit Residue. All kit residue will be reported/returned to the inventory control point for disposition. Significant amount of kit residue will be annotated on the packing list and a copy sent to the Maintenance Activity monitor to consider for kit review.

2.5.1. Upon return of a kit to the ICP an inventory of used materials will be charged to the appropriate financial account. This method will remain in place until such time as sufficient technology is in place for the US Air Force to maintain immediate asset accountability and tracking.

Chapter 3

KIT ESTABLISHMENT

Section 3A—General Information

3.1. General. Consider the use of parts kits when the repair item requires, or is likely to consistently require, the replacement of related parts or material. Repair parts kits aren't normally established for parts which don't have predictable life expectancy. For example most electronic components are not normally included in parts kits. The responsible ALC Financial/Technical Activity will, determine repair parts kits applicability during initial end item provisioning. Kits may be established after this, when they are justified. Multiple Kits (multikits) are repair parts kits for the repair of multiple quantities of an end item (end item quantities greater than one). Obtain primary TRC or base maintenance coordination, in line with the level of repair, on the economic justification record in the multikit file. Multikits may be authorized for any level of repair provided no single unit parts or other multikit containing the same components have been approved for the same level of repair. When developing repair kits the availability of support stock must be considered.

3.2. Establishing New Repair Kits. All new repair kits, proposed for establishment, will be submitted to CASC, for item entry control (IEC) review of the kit components. The coordination package will contain complete data in the Repair Parts Kit, and Establish/Review Data/Drawings file applicable to the component items. Those replacement items decisions reached during the IEC review will be implemented by the responsible Equipment Specialist.

3.3. Acquisition of Repair Parts Kits. All new repair kits will consider "value engineering" (VE) incentives. All parts within a kit must be identified and have available adequate specifications and technical data for those items coded for competitive contracting.

3.3.1. To permit accurate stock list pricing and financial management of kit inventory, the total unit cost of the repair parts kit is required by the IMS. The contract cost of the kit is available to the IMS from their copy of the distributed contract. In the event GFM or split contracting is involved, the cost will be obtained by the IMS.

3.3.2. The contractor will assemble and deliver as complete kits including all named components, both contractor acquired property (CAP) and GFM, as negotiated. The Air Force will not incur cost of a contractor kitting parts in one of their departments for delivery to another of their departments.

3.3.3. Repair parts kits will be packaged according to MIL STD-749 and marking according to MIL STD-129.

3.3.4. Kits will be established under a new NSN for tracking and identification purposes (see 5.1-5.1.4).

3.4. Requirements Computation. The requirements for repair kits are computed under the Economic Order Quantity (EOQ) Buy Computation System (D062)/the Requirements Computational System (D041).

3.4.1. Kit requirements at the Depot will be based on actual usage to minimize over stockage. Requirements for repair kits will be based on production schedules. Review of kit usage will be done on a biannual basis, or as often as required, to reflect changes in production.

3.5. Engineering and Technical Data Publications. When a repair parts kit is established or revised, the appropriate Equipment Specialist (and/or other services kit managers) personnel will update all affected engineering and technical data publications.

3.6. Disposition of Excess Kits. Excess repair kits managed by other services will be reported/returned to the managing ICP for proper disposition. For kits managed by the Air Force dispositions will be done in accordance with AFM 67-1, Vol III, Part one, Chapter 9.

Chapter 4

KIT REVIEW/REVISION

Section 4A—Kit Review Process

4.1. General. Review existing kits to ensure kit contents reflect current requirements. Review of a kit will be made at a minimum of 3 years and at other times as outlined in 4.1.1-4.1.4.

4.1.1. Receipt of any indications of an imbalance in the kit contents.

4.1.2. A design or technical order change to the end item.

4.1.3. A major change in the end item repair concept (type/method).

4.1.4. Before reprourement action of any kit, if a review has not been accomplished within the last 12 months.

4.2. Kit Review. A “one-time” kit review will be accomplished for kits with a balance in excess of total workload. If it is determined that the kit will be deleted, the 3-year kit review requirement can be waived via HQ AFMC Requirements Determination Branch concurrence. Reprourement review before reprourement will normally be done at the time of receipt of data-level notice. When a data-level notice has not been received, a review will not be required if the last review was accomplished within the preceding 12 months.

4.3. Responsible Parties. Representatives from ALC Financial, Technical, Requirements, Maintenance, and Distribution Activity, and where appropriate other services/Contractors representatives, will jointly review kits during the kit review process. ALC Contracting Activity will assist in the kit review process, as required. The Technical Activity will chair the panel. In the event a review is required for a specific problem the Technical Activity will determine those activities not needed for the review. Decisions must be by unanimous. Ensure that the date of review is recorded in the kit folder.

4.4. Considerations. Areas to be Considered during the Review Process. The length of time kit will be in service, number of items in the kit, number of long lead time items.

4.4.1. The number of kits on purchase request (PR) and on contract in relation to delivery dates, kit stockout dates, demands and consumption, individual line item need dates, and line item support.

4.4.2. Cost analysis of kit cost vs individual item procurement cost.

4.4.3. All assigned Air Force managed NSNs against D043, MIICS to ensure that, if an item is left in the kit and is contained in an I&S group, it is the master item. All replacement NSNs are screened to identify those that can be furnished by GFM.

4.4.4. Additional items for inclusion using the same criteria as contained in 4.4.

4.4.5. Each item in the kit will be individually reviewed. A kit will not be changed or deleted until each item has been individually reviewed and line item supportability is met. If it is determined that components will be partially or completely broken out, ensure that stock is available to cover lead time.

Section 4B—Revision Process and Actions Required

4.5. Kit Revision. After the initial kit review process is accomplished, and the decision is made to revise or delete the kit, assure that no line item will be eliminated until, routine cataloging action is taken for submission of nonstocklisted items, still required for repair of the end item. These items will be added to the API (Application Programs and Indentures System). Appropriate action had been taken to verify, update, correct cataloging data, and kit file, as necessary.

4.5.1. The source of supply (SOS) has been notified of new increased demands by the appropriate IMS. All line items to be eliminated must have lead-time assets available, to include assets on order and on contract, only if the estimated delivery date (EDD) will meet the required delivery date. Appropriate forms have been prepared by the Requirement Activity and sent to SOS at least 12 months in advance of projected stock outage. Appropriated action has been taken to inform Distribution Activity in advance of projected stock outage to set special levels.

4.5.2. A quarters worth of assets must be on hand to be considered supportable. Assets on order/contract to fill backorders will not be considered as being available. All required technical order changes have been initiated and necessary configuration control data has been gathered and supplied to appropriate SOS's etc. All bills of material changes have been accomplished, and API records updated.

4.6. Update Reviews. Update reviews will be conducted quarterly to assure that all support follow-up actions are accomplished.

4.6.1. Assets which will not be dekitted are those used at both field and depot. Field kits that are 100 percent replacement items should remain in field kits. Foreign military sales (FMS) peculiar kits, life support and oxygen related kits will not be dekitted.

4.6.2. No kit will be discontinued unless the kit review process has been accomplished.

Section 4C—Documentation of Kit Components, and Changes

4.7. Documentation. Maintain a historical record of parts kits (See Chapter 5, Kits Documentation). By using this procedure, a complete, up-to-date listing of valid kit components is available at all times. This documentation, in addition to any supplemental documentation, is maintained in the kit file to provide a chronological history of item additions, deletion, and kit review actions.

4.7.1. Actions, taken as a result of the review of a given kit, are documented and kept as a record in the parts kit file. All Activities involve, other services/contractors, will document concurrence which will be maintained in the parts kit file.

4.7.2. Kit unchanged. Data and information considered in arriving at this decision should be included in a kit file.

4.7.3. Kit deleted. Document reason in file to ensure it is not repro cured, terminate contract if feasible, determine disposition of remaining kits, and take action to provide line item support for affected items.

4.7.4. Kit revised. Changed kit contents and document reasons in files. Action to be consider from a cost and support standpoint are; existing kit use and make revisions at the acquisition; return kits to the contractor/other services for revisions; end existing contracts; requisition new kits/supplemental kits ; and any other economical actions.

Chapter 5

KIT DOCUMENTATION FILE

Section 5A—File Contents Documentation Specifics

5.1. Establishment Information. Repair Parts Kits, Establish/Review Data. Documentation will contain the Date of initiation of the information contained within the Documentation.

5.1.1. ALC, End Item/Weapon System/NSN/end Item Reference Number, Kit NSN, Type of Kit and Price, Type of Repair, Reason for Review, any Backup Information used, Results of Review, Date of Review/Establishment Signature of IMS/ES.

5.1.2. Coordination and date each department notified.

5.1.3. Kit Source Data to include SOS, FSCM, and any Reference Numbers.

5.1.4. Maintain documentation on all kits per AFMAN 37-139.

DENNIS G. HAINES, Brigadier General, USAF
Director of Logistics

Attachment 1

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

Abbreviations and Acronyms

AMC—Acquisition Method Code

AMSC—Acquisition Method Suffix Code

API—Applications, Programs & Indentures System

CAP—Contractor Acquired Property

EDD—Estimated Delivery Date

E/E—Engineering Exhibit

EOQ—Economic Order Quantity

ES—Equipment Specialist

FMS—Foreign Military Sales

GFM—Government Furnished Material

I&S—Interchangeability and Substitutability

ICP—Inventory Control Point

IPB—Illustrated Parts Breakdown

MIC—Maintenance Inventory Center

MIIC—Master Item Identification Control System

NHA—Next Higher Assembly

NSN—National Stock Number

PN—Part Number

PR—Purchase Request

SOS—Source of Supply

SPM—System Program Manager

TO—Technical Order

TCTO—Time Compliance Technical Order

TOC/ECO—Technical Order Compliance/Engineering Change Order

TRC—Technical Repair Center

VE—Value Engineering